

**ABSTRACT**

[00110] A radio-frequency (RF) repeater, including a first repeating section  
5 which is adapted to receive and amplify forward-signals from a first transceiver so as  
to generate amplified-forward-signals and to radiate the amplified-forward-signals to  
a second transceiver. The first section also receives and amplifies reverse-main-  
signals from the second transceiver so as to generate amplified-reverse-main-signals  
and transmits the amplified-reverse-main-signals to the first transceiver. The repeater  
10 includes a second repeating section which is adapted to receive and amplify reverse-  
diversity-signals from the second transceiver so as to generate amplified-reverse-  
diversity-signals and transmits the amplified-reverse-diversity-signals to the first  
transceiver.